THE VETERINARY RECORD

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EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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REPORT OF THE ARMY VETERINARY SERVICE—1909.

This Report is no mere record of the casualties occurring among our army horses. It is rather a critical review of the wastage of horses—an attempt to ascertain all the causes and to suggest preventive measures. It is founded upon well-ascertained facts, as shown by pages of tables and statistics.

This Report, we notice, is now a Parliamentary paper, "presented to both Houses of Parliament by command of his Majesty," which leads us to hope that it may attract some interest in Parliament and lead to more care being given to our army horses.

The secret of all good horse-managership lies in the zeal and knowledge of the master, and this can only come of practical experience. On the assumption that any man who could ride a horse could also train him, the Army Council abolished the Riding Master, and handed over the training to the squadron officer with all his fads and fancies.

Accidents are, of course, inevitable among horses, but those which occur frequently are generally due to some faults which might be avoided. Kicks seem to be very common.

The Report says; "It is evident that the question of kicks during peace time is a very serious matter; the 1,406 injuries resulted in 34 broken legs, These horses were destroyed, at a loss of at least £1,400, to say nothing of the inefficiency resulting from 1,372 animals being laid up for an average period of eighteen days."

The number of kicks on the hind legs is nearly double that inflicted on the fore limbs. The arm and thigh are the most common seats of injury; next to the thigh comes the hock. Out of the 1,406 horses kicked, 124 were themselves well known kickers. The report says:—"Kicks in the ranks are hardly avoidable; well known kickers are generally placed in the rear rank, but in spite of this accidents occur. On the other hand, injuries inflicted on picket lines, in the stable, at the riding school, while grazing or at the water trough, are preventable." We allow that a confirmed kicker is very often a good horse, but it is a question worth consideration whether when his abilities are very well developed he had not better be shot. Kicking on the picket line receives attention, and it is pointed out how, by care and simple arrangements, it may be prevented.

Fractures form the second principal cause of mortality. We are told—"Fractures of the vertebræ are becoming more frequent, they generally result from falls—some in the riding school." And this brings us to a rather curious part of the report. It commences—"Fractures, the result of collisions, are not infrequent, and the point is one of the greatest interest in the cavalry service. Collisions in peace are accidental, in war they may be intentional." A little further on we read "No matter what has been said or written regarding men riding knee to knee in a charge, it is quite certain that, unless gaps occur or ranks open out, the impact head to head or head to shoulder would mean the obliteration of the front rank on each side as completely as though they had ridden against a wall." This seems quite sensible, but we wonder what a cavalry colonel will say if he sees it in a veterinary report.

Stable injuries take a prominent place in increasing the casualty list. No less than 1,300 occurred, exclusive of kicks. Injuries from getting over the bail caused 330 wounds and six fractures. We have little knowledge of Army stables, but have always thought from our slight experience that the bails were often hung too high and the head-collar ropes left too long.

Rope galls caused 290 horses to be laid up, and the report gives three illustrations showing how a horse should be tied to a picket line, how he should not be, and the way in which injury results from too long a head rope. The prevention seems simple when you only know.

Lameness affected 22·5 per cent. of the average strength. There is an increase in arthritis, splint, ringbone, sidebone, spavin, corn, navicular disease, and sprain.

The comments on these are;—

Sprains of tendons and ligaments are very largely questions of condition and judicious work.

Splint is unavoidable. It is usual to regard it as a lameness of young horses, but it is surprising to observe that the records show the average service of the affected to be over two years, and the average age seven and a quarter years.

Ringbone is a very serious source of inefficiency and the heaviest cause of casting for lameness. The average service of the affected was five years, and the average age ten and a half years.

Navicular disease is still involved in obscurity. The average service of those affected was five and a half years, and the average age eleven.

There are two very interesting statements concerning X-rays and Radium which we must notice. They are—"The diagnosis of lameness is being assisted by X-rays. A modern apparatus has recently been installed at Aldershot, and specimens of the work may be seen in attached skiagrams."

"The employment of Radium in the treatment of disease was foreshadowed in last report, and during the past year it has been practically tested."

These and many other matters of interest are worth fuller notice, but space compels us to postpone till next week further extracts and comments.

UMI

POST-PHARYNGEAL TUMOUR.

ARTHUR NEW, M.R.C.V.S., Ashton-under-Lyne.

On Jan. 11th I was called to examine a valuable cart horse and found him much tumefied round the throat, considerable difficulty in swallowing, some interference with breathing, feverish, and appeared to have lost a lot of flesh. In the submaxillary space were evidences of small abscesses having burst, and partially healed.

History.—The animal had been unwell for about four months, but being in dealers' hands had been treated by them for strangles.

Diagnosis.—Bastard strangles with post-pharyngeal abscess.

Treatment.—Electuary of belladonna, Pot. chlor. etc. The throat well fomented, poulticed, and dressed with digestive ointment (he had been, previous to my attendance, very severely blistered), head well steamed. Bread and milk diet, and any nourishing food he would take. I left instruction that if the breathing became very difficult they should at once phone me.

On the 16th I attended hurriedly, and had great difficulty in inserting a tracheotomy tube, as the animal staggered up and down during the operation, which was only completed whilst on the floor in nearly his last gasp. However, in half-an-hour he arose, and appearing cheerful I continued treatment as before.

On the 20th a large quantity of fœtid blood and pus was discharged from the nostrils, and the whole of the head became much swollen, and at the same time large quantities of broken down blood was discharged with the urine. The animal becoming rapidly worse I ordered his slaughter.

Post-mortem.—A fibrous tumour firmly attached to the outer wall of pharynx and adherent to the guttural pouches, and large branches of the os hyoides. The tumour would not weigh more than 1lb., but the whole structures of the throat, neck, and head were infiltrated with a yellow plastic lymph.

ACUTE ARSENICAL POISONING IN THE DOG.

By HENRY GRAY, M.R.C.V.S.

In the issue of Jan. 7th, 1911, "W. R. C." relates on p. 424 that H. Jakob considers 1½ grains of arsenic are dangerous to dogs and other animals, but so far as my experience goes that estimate cannot be accepted as conclusive. Such large doses I believe are inert because they are rapidly vomited.

Some years ago I prescribed some ten grain *arsenical* powders, each to contain 1/20 gr. of arsenic, but by mistake of my then dispenser, they contained 10 grains of pure arsenic, which was sent out and given morning and night to a dachshund for several days. Beyond causing some conjunctival congestion and speedy vomition, no other ill-effects were noticed. To a small griffon bruxellois about 4lb in weight, powders containing 5 grains of pure arsenic in each were also sent out by the same dispenser, and administered by the owner morning and night. Exactly similar phenomena were observed, and as soon as the drug was discontinued these disappeared.

I believe arsenic is more dangerous when it is given in repeated small doses than when given in a great quantity. This is the conclusion arrived at by some investigator at the Pasteur Institute whose conclusions were published in *The Veterinary Record* a few years ago. He found that rats could maintain four times the fatal dose for man; whereas when given in minute and repeated doses to these creatures they easily succumbed to its toxic action. This peculiar action is not only encountered when certain drugs are given, but also in the case of vaccines and toxins administered in repeated small doses, when they produce the so-called *cumulative negative phase.*

Some years ago I recorded a case in a fox-hound where the animal ate a quantity of biniodide of mercury ointment without causing any toxic symptoms.

In cattle it is generally asserted that cotton cake containing mustard is poisonous. This may be so, but I once saw a goat eat a pound of mustard with the greatest avidity and without showing any ill effects. This case leads me to doubt whether mustard is injurious to herbivora.

ACTINOMYCOSIS OF THE COW'S UDDER.

Mr. J. Hume Patterson, L.R.C.P. and S., Ed., the Bacteriologist of the County of Lanark, contributes a very interesting article upon this subject to the current *Journal of Meat and Milk Hygiene.* It appears from the literature, he remarks, that actinomycosis of the bovine udder is regarded as comparatively rare. His experience, however, leads him to conclude that it is not uncommon. During the past five years he has examined about fifty specimens of udders for suspected tuberculosis, and has found that in five cases (thus in about 10%) the lesion was due to actinomyces. In none of these cases was the lesion observed in any other part of the carcase, and the author, therefore, presumes that infection took place by the teat from the bedding

All the specimens were very similar, and, both to palpation and the naked eye, presented every appearance of tuberculosis. The author describes the first, which may be taken as typical, by saying that "When cut into the organ was found to contain large numbers of small, cream-coloured foci, similar to tubercles, ranging from the size of a pin's head to that of a split pea. The substance of the udder was also of a brownish tint, so often seen in cases of tuberculosis of that organ." Smear preparations, however, showed the presence of actinomyces in four of the five cases, and cut sections showed the microscopic lesions of actinomycosis in all five. Four cases were free from tuberculosis; in the fifth, tuberculosis co-existed with actinomycosis, but the author found it im-

possible to distinguish with the naked eye between the tubercular and the actinomycotic nodules.

The author is, therefore, convinced that if all udders snspected of tuberculosis were examined microscopically, the proportion of actinomycotic ones would be found greater than is generally supposed. He also states that in animal inspection of dairy herds, he has found some samples of milk taken from cows with what appeared to be marked tubercular lesion of the udder give negative results on being subjected to animal inoculation. He suggests that these may have been cases of actinomycosis. Finally, he mentions a case in which milk, taken from a markedly nodular udder and centrifugalised, showed club-shaped elements which convinced him of the existence of actinomycosis, though he was unable to obtain the udder for further examination.

He then concludes by calling attention to the method of infection in actinomycosis of man. The cereal theory has been partly exploded, through cases arising which had no connection with grain, and the author suggests the possibility of infection being conveyed by milk containing the organisms of the disease, as in the case just quoted. If that be so, actinomycosis of the bovine udder requires more attention than it now receives.

ABSTRACTS FROM FOREIGN JOURNALS

A Peculiar Case of Botryomycosis.

Vogt, an abattoir director, records the following peculiar case of equine botryomycosis which he observed in meat inspection.

The subject was a grey horse, about 9 years old, in moderately well-nourished condition, which showed nothing to attract attention while living.

Numerous lesions were found post-mortem, and Vogt first describes those of the septum nasi. Both sides of this showed numerous erosions of the mucous membrane, some circular, some oval or irregularly shaped, and of a diameter of about 1-5th to 2-5ths of an inch. These erosions had not, however, penetrated through the mucous membrane, which fact could best be demonstrated by raising the mucous membrane from the cartilage of the septum with the finger. The erosions were surrounded by a rim of yellowish-colour with smooth edges; and neither a red ring nor other appearance of inflammation could be seen around this rim. In parts the base of the erosions was smooth; in parts a finely fibrous projection, lighter in colour than the base, rose from the middle of the smooth yellowish base, after the manner of a product of granulation.

In addition to this, both sides of the septum showed yellowish nodules, about the size of a pin's head, without appearances of inflammation surrounding them. Finally, the right side of the septum showed a flattish swelling, about 2 inches long by 1 3-5th inch broad, and this also showed no inflammatory reaction around it.

The lymphatic glands of the throat and the mucous membrane covering the cartilages of the nostrils showed no pathological alterations; and no nasal discharge was present.

At the transition between the mucous membrane of the tongue and that of the pharynx, some lymph follicles on the right side were enlarged and reddened. The tracheal mucous membrane showed no lesions. The bronchial lymphatic glands were considerably enlarged and infiltrated; and contained some foci which were homogeneous in structure and yellowish to yellowish-grey in colour. These foci were neither caseated nor calcified; and were not sharply circumscribed, but merged gradually into the tissue of the lymphatic gland.

The lungs felt hard to the touch, and were totally filled with yellowish nodules, the maximum size of which was that of a hazel-nut, and the consistence of which precisely corresponded with the consistence of the lesions in the bronchial glands. Deposits existed upon the pulmonary and costal pleura, after the manner of tuberculosis of the serous membranes; taking the form however of yellowish reddish nodules, some of which were pedunculated. The peritoneum presented similar lesions.

In the liver, only a few pea-sized nodules could be found; and these were situated upon the surface of the organ. The spleen, on the other hand, contained a focus the size of a child's head, which was yellowish in colour upon section. The sub-lumbar lymphatic glands, also, contained similar small foci.

Under the microscope, these pathological alterations could be demonstrated to be lesions of botryomycosis.

Vogt concludes by making some remarks upon the differential diagnosis. The lesions of the lung, pleura, and peritoneum, which might easily have been mistaken for tuberculosis upon a superficial examination, were differentiated from that disease by the homogeneous structure of the foci, in which neither caseation nor calcification were seen, and by the pedunculation of some of some of the pleural and peritoneal nodules. The lesions of the septum nasi were peculiar, and might have caused glanders to be suspected, None of the small nodules, however, were surrounded by a red ring; and the erosions were surrounded with rim-like smooth edges, none being jagged and "cut away" as is the case in glanders.—(*Berliner Tier. Woch.*)

Resection of the Intestine in a Pig.

Prof. Udriski, of the Roumanian Veterinary School, records the case of a male pig, six months old, which was brought into the infirmary of the school suffering from eventration of the intestines.

The history was that two days before it had been noticed that the animal's abdomen was perforated, and that the intestines were protruding, but how the accident had happened was unknown.

Upon examining the animal, Udriski found a tumour situated in the inferior abdominal region, about two inches from the extremity of the prepuce. This "tumour" was irregular, was very congested, and was formed by an intestinal coil which issued

from a wound in the abdominal wall. This coil was perforated at several points, through which læcal matter was being expelled; and the intestine had also contracted intimate adhesions with the abdominal wound. The temperature was 100 F.

The intestine was washed with a 4% solution of boric acid, and bandaged with a dressing moistened with the same solution. Next day the temperature was 99·6 F., and the general condition was good; the bandage had kept in position, but was soiled by fæces which had escaped in great quantities through the intestinal wounds. The bandage was removed, the whole region was washed, first with warm water, and then with the boric solution; a fresh moist dressing was applied; and the animal was dieted for operation.

This took place on the following day, when the animal's temperature was 99·3 F. The animal was anæsthetised (by chloral hydrate rectally), fixed on his back in Claude Bernard's operating trough, and the whole region was carefully washed with warm water and soap and then disinfected with corrosive sublimate solution.

The operation was then commenced by a circular incision around the fibrous swelling which encircled the protruded intestine. By this means the intestine was detached from the abdominal wall. The uninjured intestine within the abdomen was then clamped before and behind the protruded portion (gauze being interposed between the clamping instruments and the intestine to avoid injury to the latter) and the damaged portion of gut, amounting to nearly five inches, was resected along with a portion of mesentery. The cut extremities of the intestine and its interior were then washed with a 4% warm boric acid solution, and the ends were united by a double row of super-imposed sutures of fine catgut, passing through the mucous membranes and the musculo-serous coats respectively.

The intestine having been replaced within the abdomen, the wound in the wall was closed by three layers of sutures—catgut being used for the peritoneum and also for the muscles, and silk for the skin. Sublimated collodion was applied to the wound, which was then covered with a bandage.

The operation lasted two hours; this long duration being partly due to the adhesions existing between the intestine and the adjacent parts, and partly to the difficulty of suturing the intestine, which is very thin-walled in the pig. After the operation the animal was given a little water containing bicarbonate of sodium, and this drug was again given in milk two days later.

Udriski describes the subsequent progress from day to day; but it may be briefly summarised as being uniformly favourable. The animal showed some symptoms of prostration immediately after the operation; but recovered his spirits the next day and fed well upon milk, which was the only food allowed. The temperature continued to average as before the operation. Defæcation did not occur until four days after the operation, and then took place daily, the quantity passed being relatively large for the first two days after the restoration of the function. The wound healed well, and the animal was finally discharged, cured, twenty-seven days after the operation.—(*Arhiva Veterinara.*)

Cystoid Tumour in the Thyroid Region of a Dog.

Koppitz records (*Tier. Zentralblatt*) a case of a tense painless swelling the size of the fist, which he encountered in thyroid region of sporting dog. Salivation was also present, and was probably caused by another tumour corresponding to the external one, lying between the tongue and the ramus of the lower jaw, extending cone-like from the first molar to the side of the jaw, and covered witn tense mucous membrane. It was already of such a size that it hindered the prehension of solid food so much that only liquid nourishment could be taken.

The swelling on the neck was incised; and a thick, slimy, vitreous fluid, mixed with white granules, was evacuated. At the same time the swelling in the mouth disappeared; the two swellings thus evidently communicating. An attempt to scrape out the walls of this encysted tumour had to be abandoned on account of its dangerous locality, and of violent hæmorrhage.

A recurrence took place after three months; and this time the dog was operated upon in a veterinary hospital. After two months he came back as cured; but six weeks later another recurrence took place.

Koppitz now adopted the old-fashioned treatment of passing a seton through the tumour. The seton was dressed daily—at first with tincture of iodine, and afterwards with turpentine. Violent suppuration set in; but the swelling continuously shrunk, until at last only the channel of the seton remained. The seton was then removed; and healing soon took place. Since then four months have elapsed, but no recurrence has yet taken place. Koppitz thinks that the seton, now disused in veterinary practice, has given good results in this case.—(*Ber. Tier. Woch.*) W. R. C.

ROYAL COUNTIES VETERINARY MEDICAL ASSOCIATION.

The annual general meeting and was held on Friday, Jan. 27, at the Great Western Hotel, Reading. Those attending the meeting were Messrs. E. J. Mellett, of Henley-on-Thames, President, in the chair; Geo. P. Male, Reading, Hon. Sec. and Treasurer; A. L. Butters, London, Hon. Auditor; J. C. Coleman, J. Sutcliffe Hurndall, H. C. Jagger, T. W. Lepper, S. H. Slocock, R. C. Tennant, W. T. D. Broad, and F. W. Thompson, members.

Visitors: Messrs. E. Belcher, H. S. Dunn, and W. E. Petty.

Apologies for inability to attend were received from Prof. McCall, Messrs. J. R. Verney, E. L. Stroud, J. H. Wilson, T. B. Goodall (who sailed for South Africa on the following day), W. Wilson, J. Willett, G. E. King, J. Hatch, T. M. Hunt. E. Lawrence, R. Page Bull, R. Roberts, W. Shipley, Jas. East, P. W. Dayer Smith, W. Wyllie, C. Barnard, H. P. Standley, F. W. Hanks, P. J. Simpson, and Major C. B. M. Harris, and the Mayor of Henley (Ald. Charles Clements).

Financial.

Mr. Butters presented, as auditor, the statement of the Society's accounts for 1910, which he found correct.

The Hon. Sec. observed that, as Mr. Butters had mentioned, they had spent a good deal of money—really more than the funds would allow; but they had had good value for it. They had got their tooth instruments in thoroughly good repair now, and they had paid for new tooth shears, in a separate case, so that the expense of carriage would be less if the shears only were wanted. Then they had been very liberal in their grants and donations to various societies—including £10 10s. to the Victoria Benevolent, and a guinea to the National Society; and delegates' expenses to the Royal Institute of Public Health and the Royal Sanitary Institute Congresses had been rather heavy, owing to distance. On the other hand some members had been rather late in paying, but five had paid their 1910 subscription since the accounts were audited. Other expenses, however, had been kept down, and he hoped they would be able to economise this year.

On the motion of Mr. Slocock, seconded by Mr. Hurndall, the balance sheet was received and adopted.

Membership.

Messrs. H. A. Scott Dunn, M.R.C.V.S., and Edgar Belcher, M.R.C.V.S., both of Reading, were proposed for election as members of the Association by the Hon. Sec.

The President seconded, and the proposition was unanimously agreed to.

The Hon. Sec. read letters resigning membership of the Association from Messrs. R. F. Wall, Dayer Smith, and W. S. Mulvey (who has removed from London to Chelmsford), each gentleman giving as the reason that he found it impossible to attend meetings.

Mr. Jagger moved, and Mr. Butters seconded, that the Hon. Sec. be asked to write to Messrs. Dayer Smith, Wall, and Mulvey asking them to reconsider the matter, pointing out that the Association did not exist only for the holding of meetings, but that the day might come when all the profession might desire to present an organised and united front. This was carried.

It was unanimously resolved, on the proposition of Mr. Coleman, seconded by the Hon. Sec., that the next (April) meeting of the Association be held at Maidenhead.

Cases of Interest.

Mr. Male said he was looking through his stock of bones and curios the other day when he came across a lot of navicular bones, showing all the stages of the disease in the horse. He now showed some of these, which were examined with interest. No. 1 showed an erosion of the cartilage, and the bone becoming slightly spongy and getting somewhat lighter; No. 2 a little more erosion and slightly more ostitis: and Nos. 3 and 4 the rarefying ostitis which is characteristic of the disease. As they knew, there had been a discussion as to whether the disease started in the perforans tendon or in the bone itself, the tendon being involved after the disease. In the specimens he had brought they could see the changes in the bone very clearly, and that the tendon, playing over a rough surface, must get very inflamed. He had also brought three normal bones to show that in health the bone was more dense and compact outside.

Mr. Male also said that he had a horse on which he performed the ventricle-stripping operation for roaring rather more than nine months ago, about the time when Mr. Sutton demonstrated the operation at the Oxford meeting of the Association. The horse had a tube in him for some time, and his wind was very bad. He took the tube out, and did the operation, and the animal—which was his own—was wonderfully improved. He made scarcely any noise, only grunting occasionally after landing over anything big, and was a good hunter: in fact, he won several prizes last season as a show jumper. He only did the left side, where the paralysis was distinct—the right side was moving normally.

Mr. Coleman related a very peculiar case which came under his notice last September. He was sent for to a three-year-old heifer with an enormous swelling, the size of a big loaf, just above the point of shoulder. The jugular vein on that side was as big round as one's wrist. After treatment—which seemed ineffectual—for about six weeks, the swelling suddenly disappeared; but three days after it came up bigger than ever, and the animal was killed. A swelling about the size of a goose's egg had developed above the larger one.

Post-mortem revealed a most peculiar state of affairs. The pericardium was covered with enormous lumps of inflammatory tissue, and on being cut presented a gelatinous appearance: and the mediastinal glands were a tremendous size, as big as an emu's egg, and on section were found to be filled with cheesy matter, almost like tuberculous glands. He found no trace of any metal or other foreign matter. It appeared to him that the case was, according to his first diagnosis, one of traumatic pericarditis.

The Hon. Sec. asked if there were any signs of tuberculosis about the pleura.

Mr. Coleman replied only the one he had mentioned—the large caseous mass in one of the thoracic glands; all the others, when cut, were just like jelly. There was no sign of tuberculosis in the abdomen. There was a pleuritic adhesion in two or three places. He had never seen a case like it before.

Mr. Slocock, in proposing a hearty vote of thanks to Messrs. Male and Coleman, remarked that it seemed extraordinary to those in practice at the present day that they came across so few cases of navicular disease as compared with years ago. He did not believe for a moment that the disease started in the tendon; if such were the case they would get any amount of tendon lesions associated with navicular disease, whereas in such cases they usually had particularly healthy heel tendons. The fact of a horse having a strained tendon would, to his mind, indicate rather that that horse had a sound navicular bone. The tendency in low ringbone, which he thought had often been mistaken for navicular, was for the horse to go over on the joint and strain the tendon, and then they got mischief of the tendon just below the knee instead of low down.

Mr. Hurndall seconded the motion, and the vote was heartily accorded.

Mr. Male, in replying, said he quite agreed with Mr. Slocock as to the rarity of navicular disease nowadays. Ringbones, on the other hand, seemed more prevalent; and he thought they caused more lameness than navicular disease ever did.

The Motor and Petrol Tax.

In his letter regretting being unable to attend, Mr G. E. King wrote: "I would have liked to have been present to have brought forward the question of the rebate which we as veterinary surgeons are morally and justly entitled to under the Motor and Petrol Tax. The Council of R.C.V.S. do not seem to be acting at all energetically in the matter, and I think our Society should pass a resolution to force their hand a bit. May I ask you to bring the matter forward?"

The Hon. Sec. fully agreed that veterinarians were morally entitled to the rebate which the medical profession enjoyed. They all detested motor cars, whether they used them or not; but he thought medical men would agree that they had an equal right to the rebate. At any rate they would have the support of all the

agricultural community, and also of ladies and gentlemen owning pet animals. By passing a resolution urging the College to take what steps they could to get the rebate they would be helping the Council and themselves too. The Southern Counties Society had passed a resolution, and the Central had also brought the matter up. In any case it would strengthen the hands of the Royal College to have the support of those societies: and he moved a resolution to the effect indicated.

Mr. JAGGER seconded the motion, which was worded as follows: "That the members of the Royal Counties' Veterinary Medical Association unanimously request the Council of the Royal College of Veterinary Surgeons to do everything in their power with a view to obtaining a rebate off the Petrol and Motor Taxes for members of the veterinary profession to the same extent as has already been granted to the sister medical profession.

The resolution was carried unanimously.

PRESIDENTIAL ADDRESS.

E. J. MELLETT, M.R.C.V.S., Henley-on-Thames.

Gentlemen,—My first duty is to thank you for the honour you have done me by electing me your President; but the office carries with it duties and responsibilities which make me somewhat anxious. I hope that my year of office will see some progress made by this Society, and yet this cannot take place except by the united efforts of all its members. Our Secretary and myself may make all the necessary arrangements for meetings, but it is only from your attendance and your willing help that progress can result.

In past years, under very able presidents, the Royal Counties V.M.S. has held a prominent position among our various associations. Every year sees changes in our members, some leave us for ever, some retire, and we all get older. If we keep up our numbers, it must be from an influx of younger men, and to these I appeal for assistsnce in supplying us with papers and in submitting the most up-to-date views of veterinary science.

I am rather inclined to think that we cannot expect many first-class papers in any year. They occupy much labour and time, and busy practitioners cannot spare too much of either. Still, we shall always welcome them, and be grateful to the member who produces them. Where we may look for interesting matter is in the morbid specimens and clinical cases which come before us in every-day practice. I feel sure that the bringing of specimens and the relating of cases may be very largely increased with benefit to us all. No properly observed cases are uninteresting, and there is no trivial case—none that does not impart some information, or draw a usefu(fact or two from members.

I have often noticed that after a meeting is over some gentlemen can relate most interesting cases bearing upon the discussion that has just taken place. This misplaced modesty detracts from the value of our proceedings, and I venture to say that any member who has information to give will meet with attention and obtain the thanks of the Society.

It has been often said in Presidential addresses that these Societies have a great social and professional value in bringing practitioners together. They get to know each other, and to find that everyone possesses some good quality for which they had not given him credit. This side of our meetings cannot be overestimated, and it is a strong argument in favour of frequent attendance, as well as for each member attempting to persuade his neighbours, who are not members, to join at once.

It has also been said that we are "trade unions." Well, if we are, where is the fault? Every calling has its trade unions if it is worth its existence. Lawyers, doctors, chemists, and clergymen all have societies for their mutual benefit and for co-operation in the protection of their interests. It is only by union that any body of men can act effectually for their collective and individual good. I think sometimes that there is too little trades-unionism among veterinary surgeons, and that we might well cultivate much more. We are only a small profession, and unless we are closely united we cannot have the full effect upon other bodies that we should have. We have relations to the State through the Board of Agriculture and the War Office that require constant watching, and sometimes strong action to protect our interests. Unless we all pull together our interest are ignored. We have also relations to local authorities which require attention if we desire to fill positions which are certainly ours by right of knowledge and training. All that pertains to animals and their diseases, especially where the disease is one transmissible to human beings, should be in charge of veterinary experts if efficiency and economy are desired by the public. Even in our private practice with our individual clients we cannot neglect the value of professional co-operation. Such matters as fees, consultations, and general etiquette cannot be fixed without some agreement with others. All these matters come easy to men who know each other and are willing to co-operate.

During the last two years an attempt has been made to bring about a union of the many local societies in the Kingdom. It has not been successful. There are great difficulties in the way, the most important being to preserve the independence of each society and to arrange a workable financial scheme. I should be pleased to see a union of the whole if the difficulties I have mentioned could be surmounted—but we must remain independent.

There is one matter of importance to all veterinary surgeons which in this rather disconnected discourse I must allude to. Our Body Corporate is poor, and, without drawing upon its small accumulated capital, so poor that many things are not done which ought to be done. A larger income is necessary, and a Bill is to go before Parliament with a hope that we may obtain power to tax ourselves and so increase the efficiency of our Council. I see no objection to this Bill, but I think perhaps we should be more united in our desire to see it pass if, instead of a guinea per annum, half that sum might be collected. If it were found that one guinea was necessary we could fix that amount. If half-a-guinea would meet our requirements, then provision might be made for acceptance of the smaller sum. If the Bill read—"An annual payment not exceeding one guinea" the Council could then demand any less sum they found sufficient.

During the past year there have been two or three events in veterinary science which are worth notice. The report of the Committee on Contagious Abortion shows that Sir John M'Fadyean and Mr. Stockman have done good work and been successful in identifying the causal organism of the disease. If an order is issued by the Board of Agriculture in accordance with the recommendations of the Committee, local authorities will have to carry it out. This will entail diagnosis of the reported outbreaks by veterinary inspectors, and these gentlemen must possess a practical acquaintance with microscope work that has hitherto not been so essential. In this connection, too, I may just refer to the fact that the new Anthrax Order is now in force and that it provides for verification by the Board of the inspectors' microscopical preparations.

Nothing has yet been done for tuberculosis except where milk is likely to be contaminated. The Tuberculosis Order which was issued but withdrawn should really be enforced. Its provisions would have afforded some control over the disease and caused no annoyance

to anyone. Its effect would have been to direct greater attention to the disease, and thus produce an educational effect on the owners of stock that only legislation seems able to do.

Swine-fever and Sheep-scab do not show much decrease in the face of legislation, and Anthrax seems to increase.

Only in the case of Glanders is there a visible decrease due to the Board of Agriculture's action. Probably another year will see this disease extinct in Great Britain.

I learn that I am expected to make a few remarks on the new operation for roaring and whistling.

For some years now, eminent and skilled veterinary surgeons in different countries have been making attempts to cure, or relieve this complaint by operation, but it was only recently that any degree of certain or permanent success crowned their efforts.

About a quarter of a century ago in England Mr. G. Fleming, Prof. Axe and others were operating by removing certain cartilages of the larynx—the arytenoid, and, as is no doubt well known to you, these earlier operations were for all practical purposes a failure, and abandoned as such. The new operation of "ventricle stripping" made its advent into this country during the last two years, and for this I think we are greatly indebted to our worthy Prof. F. Hobday. He brought the eminent surgeon, Dr. Williams, from America to this country to demonstrate the operation to him.

Since then Hobday and others in this country have operated upon a great number of cases, and, so far as can be judged, the results show a measure of success beyond all expectations. Latterly Hobday has been stripping both ventricles, which he claims to be a great improvement. Of the operation generally I cannot personally claim much practical knowledge, but from what I hear, and learn from statistics, a great percentage of worthless animals have been by this means restored to usefulness.

Of course, as in everything, there have been failures, but the number of cases where no relief was afforded are very limited. At such a stage we cannot do more than wait, for time alone will show whether the relief so manifested in these early cases will remain permanent.

I will conclude by again repeating my desire for all the assistance you can each give, and by a promise that your President will do all he can for the interests of the Royal Counties Veterinary Medical Society.

Mr. HURNDALL proposed, and Mr. Jagger seconded a very cordial vote of thanks to Mr. Mellett for his highly appreciated address; and the same was accorded by acclaim, and briefly acknowledged.

The company then inspected with interest the hunter of which Mr. Male had spoken.

THE DINNER.

The annual dinner followed at the Hotel, Mr. Mellett presiding, and the Mayor of Reading (Ald. J. W. Martin, J.P., Mr. Councillor John Eighteen, Ex-Councillor Wm. Bonny, and others, joining the company. The repast was served in perfect style under the personal direction of the Manager, Mr. Papps

"The King" having been loyally toasted on the call of the President, and the National Anthem sung,

Mr. HURNDALL proposed "The Imperial Forces." While he had advocated peace all his life, he thoroughly realised that public opinion was in favour of the maintenance of a very strong Navy, a powerful Army, and a really useful Territorial Force. The author of "The Great Illusion," a great advocate of peace, and of the reduction of armaments, confessed that at the present time there was very little to be done. At the same time he certainly made suggestions which appeared to him (Mr. Hurndall) capable of being applied. He felt fully convinced that at the present time our Forces were in a very exemplary condition. We had spent vast sums of money on the Navy, the Naval estimates having grown within the last ten years from twenty to about forty millions. Those gentlemen who had formed themselves into the Territorial Division of the Service would, he believed, render a very good account of themselves if needed, but he did not believe that any enemy would ever be able to land on these shores. (Hear, hear).

Major TENNANT first replied. He observed that we must keep up our Navy to the necessary standard, whether it cost forty or eighty millions a year, because our standing Army and our Territorial Force were so small in numbers; while horses were so scarce that in the event of a war "the Cavalry would have to foot it." (Laughter and Hear, hear). He had had the honour of serving for eleven years in the Honourable Artillery Company, and now belonged to the Berkshire Horse Artillery, whose headquarters were in Reading. The latter were very capable men, and if every Territorial Battery in the Service were as good it would be well, for their numbers were full up and the men very keen and a good sample. (Applause.)

Capt. COLEMAN, whose name was also associated with the toast, said that in the 3rd Wessex Brigade they had what he considered an excellent little scheme. The Major of the Wilts Battery had bought some horses and put them out with tradesmen, who were only called on to insure the animals and let them be used for drill purposes, and for each year's annual training. In addition to that they had another scheme on foot, viz., they were marking all the horses they had this year. An Artillery horse had to go into school six months before it went to the guns; but they—"poor devils!—had to take horses which might never have had a collar before, while many of the men had never been on a horse before they joined. Such a "system" as that could not last. (Hear, hear). Therefore they now tattooed every horse, and it was suggested that every County should have a certain letter or number for each unit, by which they could know their horses. In that way every horse that became known as a kicker or jibber would be weeded out, and in that way they would get useful horses. (Hear, hear.) The men themselves had any amount of *vim* in them; but there was a great deal too much "red tape." and until some of that was removed, and the people who did know could assist, he was afraid matters would not be much better. (Applause)

The MAYOR of READING gave the toast of "The Veterinary Profession." His Worship began by saying that, when he told his wife he was going to dine there that evening, she remarked that she thought the work of the veterinary surgeon more difficult than that of doctor, because the latter could question his patients and so be helped to a conclusion, but when the veterinarian saw a poor horse or dog suffering he had to form his own conclusion as to the cause. He was sure the gentlemen present always did their very best for the animals they attended, and also for their owners, and, as a layman, he tendered them his best thanks for their devotion, great skill and assiduity in the discharge of their very excellent profession. When he was Mayor of Reading eighteen years ago he had the honour and pleasure of joining that Association at dinner. In Reading they were proud of the profession. They would not forget the names of Wheatley and Flanagan in that town. As a lawyer he (the Mayor) never knew a better witness in the box than William Flanagan. When he (the Mayor) was Secretary of the Berks and Bucks and also of the Reading Football Associations he used to play with the late Albert Wheatley, who was a real good, sterling fellow, and, like his father and William Flanagan, a credit to the profession. (Hear,

hear.) He called upon them to drink to the veterinary profession, who had in its ranks many able, earnest and thinking men—men whom he esteemed and admired, and men who did their duty to their clients, and—he hoped—to themselves. (Applause.) He coupled with the toast the name of Mr. Slocock, who was a great supporter of the Society.

Mr. Slocock, in returning thanks, observed that, although the profession was at the present time in rather lower water than it should be, it was a profession to which it was an honour to belong. He thanked his Worship the Mayor for his presence that night, and for his kindly words. (Hear, hear.) The profession had many phases, and it was a pleasure to listen to the opinion of the outside world. His Worship sympathised with them because their patients did not talk: but that seemed to him (the speaker) rather a matter of congratulation sometimes. They would not like a lady's cat to go home and relate everything that had occurred, especially if the cat had happened to go up the chimney. (Laughter.) He believed that a man who was honestly following his calling as a veterinary surgeon was in a happy position individually, although their numbers were small and their profession was not thriving. Those present, and others, sent him as a member of Council some two years ago; and he was only just becoming initiated. The Council was a much more hard-working assembly than he had thought possible, and did far more work than any man who had not been there could appreciate. The amount of work done in committee was one of the things that never came to light; there were many things which members of the Council, like Freemasons, did not mention, and things which were—as the legal profession say—*sub judice*. (Hear, hear.) The Parliamentary Committee, of which he did not happen to be a member, were working hard and honestly for the profession. They were in a bad way—to put it vulgularly—they were "broke!" Their source of income had become insufficient for the upkeep of the profession, and they wanted not only to ensure the upkeep of the profession, but to take it ahead. (Hear, hear.) They wanted individual members to help to keep the profession going, and for that they must have money. If they could get what they called "*the* Bill" through Parliament in its present form it would put them on a basis from which they could carry on the work of the profession to the advantage of all. Two of the Fellows had appreciated the position—they had recognised "the poverty of the land," and each had sent the Council a guinea. They ought all to be willing to subscribe yearly to keep up their profession. The members of the legal profession payed a yearly registration fee, and they must also be willing to subscribe their guinea. Every honest and good member would, he was sure, be glad to be annually registered; and he was sure the public would appreciate that position. (Applause.)

Mr. Bonny proposed the next toast—that of "Success to the Royal Counties' Veterinary Medical Association, the President and Officers." For over twenty years, he said, he had been a regular attendant at those gatherings, receiving their friendly hospitality. During that time many changes had taken place in their membership, and the Mayor had referred to some of the losses the Association had sustained. But, although old ones passed away, he was glad to see young ones coming on who, he was sure, would carry on the honourable traditions of that Association. He was glad to see Mr. Petty there, for he believed that in due time he would become a worthy member of their honoured profession. He congratulated them on possessing an able Hon. Treasurer in Mr. Male, who was a worthy successor in Reading to their dear friend Albert Wheatley, and he had no doubt that in due time Mr. Male's name would be as well known and as highly respected in the town as was that of his predecessor in the practice. (Applause.)

The President said that in responding to that toast he also wished to thank the members for the position in which they had placed him. Like himself, Mr. Bonny, who had spoken so kindly of the Association, missed old faces, but they were still very well represented in the profession, and he was perfectly well satisfied with the company who had honoured him with their presence that day. The Royal Counties' Association had done some good work in the past, and he hoped that during his year of office they would still hold their own. (Applause). It remained for every member to support their President and their Association, to make the meetings business meetings as well as social, and if that were done he felt that when they met that time next year in that room they would be able to look back and say that they had held their own. If that should prove to be so he should have nothing to regret. (Loud applause.)

Mr. Butters next replied. It was many years, he said, since he joined the Royal Counties' Association, and he must say the meetings at Reading had been some of the pleasantest he ever attended, both professionally and socially. Of course in those years one missed old faces, and among others he missed their very dear old visitor Capt. Giles Ayres, who was a typical Englishman and yeoman of whom any town or any society might well be proud. It was pleasant to know that younger men were coming on. Although he (the speaker) was getting on in years, his heart was as warm and his feelings as strong as ever towards the veterinary profession. (Applause).

Mr. Male also returned thanks, observing that it was the privilege of a secretary to act and not to talk much, and so he left it to the orators of the profession to do the honours of the festive board. He must, however, thank Mr. Bonny for the way in which he had proposed the toast, and for the kind words he had used towards himself. He hoped that Association would have a very successful year, and that all the members would actively support it. It would be a very easy matter for a secretary to hold his position and to do himself credit and justice if he was supported by all the members. Veterinary surgeons were such a very self-denying lot of gentlemen that they denied themselves dinners and all sorts of nice things often if a cow was calving, throwing off their dress suit and rushing to do their duty, and he took it that a great many of their members were "doing their duty" that evening, or otherwise they would be these. (Applause and much laughter.)

Mr. Butters gave "The Mayor and Corporation of Reading" in appropriate terms.

The Mayor, in reply, regretted very much that the Mayor of Henley could not be with them that evening, and proceeded to comment on the growth of Reading, the population of which, when the Extension Bill now before Parliament passed, would be near 100,000.

Mr. Lepper, proposing "The Visitors," said he had attended that dinner for a great number of years, and they had always been fortunate in the attendance of excellent visitors and friends, of whom Mr. Bonny was one of the oldest, while their old friend "Jack" Eighteen was well known to most of them. They often had the pleasure of paying him a visit, and he supplied his clients with very excellent cattle, and did not give members of the profession much trouble. (Hear, hear.)

Councillor Eighteen made a characteristic response.

The speeches were interspersed with capital songs by Messrs. Bonny and Petty, a recitation by Mr. Butters, and up-to-date "anecdotes" by several members of the company.

IRISH CENTRAL VETERINARY ASSOCIATION.

A meeting was held at the Limerick Junction Hotel, on the 28th ult. Present: Messrs. J. F. Healey, President; P. J. Howard, Ennis; C. Tracy, Ballinasloe: W. Power, Tipperary: Allan Baker, Bansha; T. Mulcahy, Clonmel: and E. C. Winter, Limerick, Hon. Secretary.

Letters of apology for absence were received from Messrs. Moffett, Dawson, Watson, Nolans, Heney, and Creagh.

The Secretary was directed to write to the Secretary of the R.C.V.S., *re* advertising by a member. He was also directed to write to the Secretary of the Local Government Board, directing his attention to the fact a medical practitioner was appointed to do duty under the "Dairies, Cowsheds, and Milkshops Order," by the Urban Council of Fermoy, without advertising, and without the knowledge of the resident V.S.

It was agreed that a subscription of two guineas be paid to the Hon. Sec. of the Committee of the "Proposed Amalgamation of Veterinary Societies" to help to defray expenses.

The officers for 1910 were unanimously re-elected for 1911, and Messrs. Howard and Patrick were appointed to audit the accounts. The Treasurer was directed to have the audit complete by the next meeting, to be held in Dublin, on the Tuesday of the Spring Show.

NOTES ON CLINICAL CASES.

By C. TRACY, M.R.C.V.S., Ballinasloe.

Mr. President and Gentlemen,—When our worthy Secretary asked me to read a paper before this Association I felt greatly honoured, but, at the same time, I felt my unfitness, as a young practitioner, to do so; however, I have tried to make the following notes as interesting and as varied as possible.

"LAC COVENTUM."

A black Kerry cow, three or four months after calving. The history I got was that for the last month the milk occasionally had pink tinge, sometimes from one quarter, sometimes from another; this would last one milking, or a few days, and reappear at a variable time. The cow was apparently perfectly healthy and the food good.

Treatment.—I administered a purgative and applied a stimulating liniment to udder. This appeared to have a beneficial action for a time, but after a little she got just as bad as ever.

The owner asked me if this trouble would continue after the next calving, but I could tell him nothing definite.

The cow has since calved, and I believe no blood is now appearing in the milk, but one quarter is quite blind, not a drop of milk has come from it since she calved, now some months. I wonder what was the cause, or is there any connection between the two affections?

GASTRIC TYMPANY CAUSED BY INFERIOR OATS.

Subject.—A six-year-old horse, taken in off grass in the morning in order to get him fit for work again.

History.—About 2 o'clock the owner came for a dose, as he said the horse had "a touch of the gravel." I gave him a mixture containing Pot. nit., Spts. æther nit., and liq. ammon. acet. At about 8 o'clock that night I was asked to see the horse.

Symptoms.—I found him standing, dull, not inclined to move, respirations quick and catchy, sweating in patches, no tympany of intestines noticeable even by rectal examination. Pulse weak and frequent. Temperature elevated a couple of degrees. Conjunctiva slightly reddened. During this time I noticed once or twice a peculiar spasmodic contraction of the muscles, somewhat like to the action of a crib-biter, but far more spasmodic.

Diagnosis.—Gastric tympany. Cause, food.

A feed of oats was given about 12 o'clock noon, and, as far as I could find out, another some time in the evening, but the truth was hard to discover. This oats was inclined to be musty, and dirty, barley mixed through it, and it had the appearance of being the sweepings of a loft, and as the hay was of fair quality, I had no hesitation in blaming the corn.

Treatment.—Immediate administration of a draught containg Ferri sulph. liq. and Ammon. fort. in warm water, followed up by warm enemata, and a Hypodermic injection of Eserine sulph. ℥j. The symptoms abated somewhat after this, but the eserine had scarcely sufficient effect, however, I thought he would come to, and after some time followed up with an antiseptic and carminative composed of Ol. tereb., Ol. menth. pip., Ol. lini, and left him apparently easier.

About a quarter of an hour after this a mare in same stables came in from Shannon Bridge (six miles) where she had a feed of the oats shortly before starting. About a mile or so from home, the driver noticed something wrong; however, he got her in. When I saw her she was standing in her stall, exhibiting symptoms similar to the horse, but altogether milder, except that the eructations were much more frequent and pronounced, and were almost invariably accompanied by a small, quick, suppressed squeal of pain.

This mare was immediately given a similar draught as the horse, *i.e.*, Liq. ammon. ferri sulph. and boiling water. Followed up after some time with Ol. lini, Ol. tereb. and Ol. menth. pip. In this case no further medicine was given that night, the mare quickly responding to the treatment, and becoming easier.

About an hour afterwards on visiting the horse he was found as bad, if not worse, than ever, lying stretched out on his side and pulse again weak, in fact almost imperceptible, but no eructations were now traceable.

Eserine sulph. gr. j. was given, and also copious enemata. The Eserine took full effect in about twenty minutes, and large volumes of flatus and liquid fæces were passed. From this time the horse steadily recovered, and both horse and mare ate a bran mash greedily in the morning, and that evening each was given Ol. lini., Ol. tereb., and Spts. ammon. aromat.

RED IODIDE OF MERCURY IN ACTINOMYCOSIS.

An aged cow was suffering from actinomycosis of the base of the tongue, was at first treated with potassium iodide, three times a day, sufficient medicine being given to last for a week, and the owner instructed to come in and get another bottle when that one was finished.

But he did not put in an appearance for three weeks; he then said the cow did so well he thought she was all right, but was now as bad as ever again. This time he got red iodide, dissolved with potassium iodide (grs. 10, three times a day). But after four or five days the cow showed no sign of improvement, she was again changed to potassium iodide, as before. This pulled her together again a bit, and when the bottle was finished, she was again put on red iodide and potassium iodide, but with this line of treatment she got worse and eventually died.

It struck me as peculiar in this case that the potassium iodide had always a beneficial effect, while the red iodide of mercury, had apparently, no effect, or, if any, a bad one.

TRAUMATIC HERNIA IN A PUPPY.

Subject.—A foxhound puppy about six months old.

History.—Run over by a motor car a week before; a large swelling was observed on the left side, at a level

with free border of posterior rib, but extending more towards the elbow, this hernia was about six inches from front to back and about four from above to below, easily reducible by placing hound on right side, but then extremely hard to find hernial ring.

Treatment.—Operation. I had no one to give chloroform, so tried hypodermic injection of morphia sulph. gr. 1¼, which took full effect in about 30 minutes. After the usual antiseptic and aseptic precautions, on account of a difficulty in exactly locating hernial ring, I made an exploratory incision through the anterior third of the white line. By introducing the finger I found the hernial opening was slit like, about three or four inches long, and followed the direction of exterior edges of ribs, *i.e.*, in direction downwards and forwards (with hound in standing position) and further, instead of going straight out through the abdominal wall, it sloped upward and forward (standing position). It was I think, more a tearing away of the muscles from their attachment to the outer aspect of the rib than anything else. This accounted for the difficulty in discovering site of hernial ring exactly by external manipulation, as the external opening was really over the side of chest.

Having marked exactly the site of injury, I closed the first opening and made an incision over the rupture, the edges of which were brought together with interrupted sutures of sterilized silk, the only difficulty being to get sufficient hold for the stitches over the rib. Having closed skin wound, I kept on a sterilized pad and bandage for a few weeks, and nothing further occurred, of interest.

My reasons for recording this case are :—(1) The peculiar nature of the hernial ring. (2) To obtain your views on the use of morphia in canine practice—in this case it was certainly satisfactory. (3) On thinking over hte case since, I have wondered if, on account of the valve-like nature of hernial ring, a simple pad and bandage would have effected a cure.

MILK WITH STRONG SMELL AND TASTE.

In a fairly large dairy herd in my district, the trouble generally starts two or three weeks after calving, and if neglected the cows waste almost to skin and bone, even with good care they reduce awfully and lose their milk. From the time they get bad the milk has this ugly smell and is thick. Even one pan of this milk in a dairy can easily be detected by the smell. The cows breath has a similar odour, sometimes it can be detected on entering the cow shed. Constipation and dullness is present, but no fever. Pulse not greatly altered. Linseed oil followed up by tonic powders usually overcomes the constipation, and then the milk may gradually improve, but, not infrequently, as soon as the powders are finished the cow relapses into her former condition. This condition of things may continue in some cases for a few weeks, before resolution eventually takes place.

The cause is difficult to find, I thought it might be the feeding, but yet I do not think it can be. As soon as a cow calves she gets a chilled drink of meal and water, and afterwards bran mashes, twice a day, with drinks two or three times a day, hay and sometime silage. No roots for the first week, and no cake for the first three weeks or longer. The pasture is, I think, healthy.

An animated discussion then took place in which all the members present joined, and a unanimous vote of thanks was passed to Mr. C. Treacy, for his interesting paper, and for having come such a long way to read it.

The President expressed his regret that the attendance was so small, and said that the loss was to the men who were not present, as discussions on such papers are eminently instructive and valuable to the profession.

DISEASES OF ANIMALS ACTS 1894 TO 1910, SUMMARY OF RETURNS.

Period.	Anthrax. Outbreaks Confirm'd	Anthrax. Outbreaks Reported	Anthrax. Animals Confirm'd	Anthrax. Animals Reported	Foot-and-Mouth Disease. Outbreaks	Foot-and-Mouth Disease. Animals.	Glanders (including Farcy) Outbreaks	Glanders (including Farcy) Animals.	Counties Affected Animals Attacked	Sheep Scab. Outbreaks	Swine Fever. Outbreaks.	Swine Fever. Slaughtered. *
GT. BRITAIN. Week ended Feb. 4	24	...	26	...			5	14	Berks 7	28	31	252
Corresponding week in 1910	...	28	...	31			7	16		22	20	199
Corresponding week in 1909	...	24	...	25			14	25	Hertford 1	51	26	198
Corresponding week in 1908	...	29	...	32			12	44		77	23	136
Total for 5 weeks, 1911	109	...	121	...			22	69	London 5 Lanark 1	149	172	1775
Corresponding period in 1910	...	152	...	183			32	98		160	102	690
Corresponding period in 1909	...	139	...	175			45	96		190	158	1043
Corresponding period in 1908	...	135	...	200			84	292		291	155	672

Board of Agriculture and Fisheries, Feb. 7, 1911.

Period.	Anthrax. Outbreaks Confirm'd	Anthrax. Outbreaks Reported	Anthrax. Animals Confirm'd	Anthrax. Animals Reported	Foot-and-Mouth Disease. Outbreaks	Foot-and-Mouth Disease. Animals.	Glanders (including Farcy) Outbreaks	Glanders (including Farcy) Animals.	Parasitic Mange (outbreaks)	Sheep Scab. Outbreaks	Swine Fever. Outbreaks.	Swine Fever. Slaughtered. *
IRELAND. Week ended Feb. 4	1	1	...	...	...	...	3		20	2	4	
Corresponding Week in 1910 ...	...	...	...	...	...	...	1		17	3	73	
Corresponding Week in 1909 ...	...	...	...	...	...	...	3		13	...	...	
Corresponding Week in 1908 ...	...	...	...	...	...	...	...		25	3	40	
Total for 5 weeks, 1911 ...	2	2	...	...	...	...	11		116	19	285	
Corresponding period in 1910 ...	2	2	...	...	...	...	13		117	5	156	
Corresponding period in 1909 ...	1	1	...	...	...	...	12		85	3	12	
Corresponding period in 1908 ...	1	1	...	...	...	...	3		107	17	347	

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, Feb. 6, 1911

NOTE.—The figures for the Current Year are approximate only.

* As Diseased or Exposed to Infection

MEAT INSPECTION.

A paper read before the Glasgow and West of Scotland Agricultural Discussion Society, by Mr. A. M. TROTTER, M.R.C.V.S., Glasgow.

Mr. James Kennedy, of Doonholm, Ayr, who presided over a fair attendance, in introducing Mr. Trotter, said that meat inspection was a very important subject, and they had with them that night an eminent veterinarian, the chief inspector for the Corporation of Glasgow, who had come to give his views on the subject. (Applause.)

Mr. TROTTER, who was well received, said—When I was asked by our mutual friend, Mr. MacNeilage, to give a paper on meat inspection before your society, I desired that the subject be extended so as to cover milk and its products. However, when the syllabus was put into my hands I saw that the paper put down for me was simply meat inspection. On referring to the dictionary, however, I was gratified to find that "meat" covers all food products, and, therefore, in extending the subject to cover the ground over which I originally intended to traverse, I hope to be excused, as there are many points dealing with milk and it products which ought seriously to be debated by the agriculturists of this country.

The most important disease that meat inspectors are called upon to detect in this country is that of tuberculosis. Tuberculosis was undoubtedly well-known to the ancients. In some old writings a pen picture is portrayed which can only apply to this dreaded disease. I think there is, unfortunately, reason for believing that the disease is gradually becoming more prevalent and more widely distributed. This is extremely unfortunate, because tuberculosis is undoubtedly a preventable disease. Bang has stated that out of every 1,000 calves born there are four that are tubercular at birth. This estimate I believe to be approximately correct. Investigation into the relative frequency of this disease at different ages shows that it becomes more prevalent at each successive period. Röche, who investigated the age incidence in bovines, has tabulated the results of his enquiry as follows:—

	Affected.	Per cent.
Up to 6 weeks old	208	0.4
From 6 weeks to 1 year ...	312	0.6
From 1 year to 3 years ...	5,852	11.4
From 3 years to 6 years ...	16,993	33.1
Above 6 years...	22,279	43.4

I have heard it stated that meat inspection is a powerful factor in the eradication of tuberculosis. Now, I cannot for a moment claim that meat inspection, and meat inspection alone, can have any direct influence in the eradication of this disease. How can it do so? The animals, before they pass under the review of the meat inspector, are dead, and it cannot, by any stretch of imagination, be contended that the animal in that condition can spread the disease to its fellows—that is, of course, if the destruction of all diseased products follow, as it ought to follow, the detection of the disease. We know, of course, that where the incomprehensible practice of feeding pigs with slaughter-house refuse is carried out these animals are found largely affected with the disease through ingestion—but in that case the meat inspection methods are faulty. The eradication of bovine tuberculosis can only be undertaken and successfully accomplished by the stock-owners. I am surprised that agriculturists do not take more stringent measures to bring up young stock free from all contaminating influences. In other countries—take, for instance, Denmark and Germany—a strenuous fight has for years past been fought by stock-owners to diminish the ravages of animal tuberculosis. The system of Bang is well-known, but that of Ostertag is of more recent date, and it may not be so well-known to many of the members of this society. I will, therefore, briefly narrate its more salient points.

OSTERTAG'S METHOD.

Ostertag divides all animals affected with tuberculosis into two groups, namely, "close" and "open" cases. When the disease is limited to, say, a single nodule in a lymph gland, or to any organ where there is no chance of escape for the tubercle bacilli, then that case falls under the classification of "close" tuberculosis. On the other hand, if the disease has progressed and there is a large area, the limiting membrane of which has become ruptured, permitting the escape of the contents into any of the passages communicating externally, then it falls under the term of "open" tuberculosis. An animal affected with open tuberculosis is a source of danger to its fellows by reasons of the tubercle bacilli which are expelled from its body. Ostertag aims at the elimination of all these "open" cases, no matter whether the animal be affected in the udder, in the lungs, in the bowels, or in the uterus. To attain this end Ostertag has formed what he calls farmers' clubs. Each member pays a small annual fee according to the number of animals in his herd, and each year these herds are carefully examined by a veterinary surgeon. If this veterinarian suspects that any animal is affected with "open" tuberculosis, he carefully collects samples of material, which he forwards to a central institute for bacteriological examination. Further examinations are carried out if circumstances arise which demand them. The greatest care is exercised in the rearing of young stock, and although Ostertag's system has only been in operation for a few years, the most gratifying results have been obtained. Now, I fancy that I hear some members saying, "What has all this got to do with meat inspection?" My reply to such a question is that it has got everything to do with the matter. If stock-owners so reared their animals that they were free of tuberculosis, the work for meat inspectors would be infinitesimal. Undoubtedly the loss to this country through the confiscation of tuberculous meat is great, but, whilst the loss does not fall directly on the agricultural community, it falls indirectly. There can be no shadow of doubt but that the butcher buying home-fed animals is not inclined to pay the true market value of that animal on account of the risk that he must necessarily run. Nor can you blame the butcher for protecting his own interests.

DECREASE IN HOME MEAT SUPPLY.

Every year there is a distinct falling off in the number of traders who buy home-fed animals for slaughter on account of the risk they incur. They prefer to buy imported meat. Would you not adopt similar tactics were you in their position? Most certainly—human nature is the same all over, be it stock-owner, butcher, aye, even Cabinet Minister. Now, gentlemen, is it good for the country that our home markets are to be captured by the foreigner? Are you, the descendants of the old Covenanters, to tamely evacuate your vantage ground without a struggle? I trust not—but, dispassionately, let me enumerate what you as stock-owners have done to prevent the capture of your own markets by those living over the seas. Can any of you state what either you as a body of intelligent stock-owners, or the Government, be it Unionist or Radical, have done? What have you done? Nothing, if you except, perhaps, a growl or two against unfair competition. Have any of you attempted to eradicate tuberculosis out of your herd? No; well, that is your first line of defence. Tuberculosis is undoubtedly a preventable disease. There is no need for you to sit down and resign yourselves to the inevitable. Tuberculosis can be prevented,

and it is simply your own carelessness that this disease is so rampant among your herds.

Bang's Method.

I have only to refer to the excellent results obtained by Bang's method in Denmark to demonstrate that a diseased herd can be transformed into a healthy herd by the adoption of preventive measures. This may be briefly summarised as follows :—Very few animals are born tubercular, and, with these few exceptions, all that are found in later life to be affected have become infected by tubercle bacilli gaining access to their system through the air they breathe, the food they ingest, or by direct inoculation. It is not the purpose, however, of this paper to enumerate in detail the measures required for the eradication of animal tuberculosis, but with the view of showing the direct relation between meat inspection and eradication, and the precuniary benefits accruing to the whole community, I will here quote from the annual report of the veterinary inspector to the New Zealand Government :—

Tuberculosis in Pigs.

"The measure most immediately necessary is the compulsory heating to a temperature high enough to render tubercle bacilli innocuous, of all separated milk and whey at dairy factories and creameries. This has been strongly advocated in previous reports, and I would once more emphasise the necessity for it. As I have already pointed out in a special report already published, this would undoubtedly reduce the number of tubercular pigs by at least 80 per cent., and probably 90 per cent., and moreover would have a markedly beneficial effect in checking the spread of the disease among cattle, by removing the fertile source of infection now provided by the rearing of calves upon separated milk or whey containing tubercle bacilli. A striking object-lesson in the value of this measure is afforded by the experience this year of a large dairy farmer in this country, who deals with the whole of the milk yield of his cows in his own factory. Though a good farmer and a careful breeder, he has been unlucky enough to have had extensive tubercular infection among his cows for several years past. His experience last year with pigs fed on separated milk derived from his cows was detailed in the last annual report. For the purpose of comparison, the figures concerning this are given below. This year he installed a plant for pasteurising his separated milk before feeding it to his pigs. He obtained a pasteuriser, but, unfortunately, this, owing to the ineffectiveness of the factory boiler, did not give satisfaction in working, and it was removed, a system of heating the milk by direct steam being substituted. This did not enable him to raise the temperature to the standard accepted as necessary for pasteurisation with proper appliances—viz., 176 deg. Fahr.—but, on the other hand, it was held at a lower temperature for a considerable time. Even with this inadequate appliance, the results have been most startlingly gratifying. Note the comparative figures :—

Number of pigs killed on certain occasions.	Number found Tubercular.	Percentage Tubercular.
1907-8.		
(1) 63	39	61.90
(2) 110	65	59.09
(3) 50	50	100.00
1909.		
Jan. 20 ... 28	*3	10.70
Feb. 23 ... 36	0	0.00
Mar. 23 ... 40	0	0.00

* Two very slightly affected.

These figures speak eloquently for themselves. All three pigs were, as before, examined at the time of slaughter by Government inspectors, and previous to slaughter had been bred, housed, and kept under exactly the same conditions as in previous year."

Situation in Glasgow.

Now, let us view the importance of preventive measures so far as they affect our interests. The pigs slaughtered in Glasgow during the past three years were affected to the following extent :—In 1907, 7·01 per cent. ; in 1908, 7·36 per cent. ; and in 1909, 5·10 per cent. Were we in Glasgow to follow strictly the recommendations of the Royal Commission on Tuberculosis, which were issued by the Local Government Board for Scotland as a guide to meat inspectors in the adjudication of carcases found affected with tuberculosis, it would entail a loss of 5 or 6 per cent. of pig carcases. That, of course, means a heavy financial loss, which, on the direct showing of Mr. Reakes, the New Zealand Veterinary Inspector, could have been avoided by the feeders taking precautions. Although these recommendations are not followed in every case, it means that the affected portion is destroyed, and in some cases the whole carcase, depending on the extent of the disease, and this means a heavy financial loss to the butcher, who, naturally, wishes to purchase at a price which will compensate him for any loss arising through seizure. Naturally, if the butcher was certain that every animal he purchased was free from tuberculosis, and fit for the purpose he bought it for—namely, for human food—he could afford to pay more for the living animal, and the feeder would receive a greater remuneration for his labours. You have also to consider the waste of good food material in feeding the animal to good market condition. Your whole labour and food required has been virtually lost, whereas had you taken proper precautions your labour and the food material employed to fatten the animal would not only have been a direct gain to you, but also to the whole community. Were the stock-owners to employed preventive measures, and place on the market animals that are fit for the purpose for which they are intended, there would be much less need for importing supplies from overseas.

Milk and Dairies.

With reference to the milk question, I think it would be advisable that the powers at present possessed by local authorities to frame bye-laws under the Dairies, Cowsheds and Milkshops Order be rescinded, and that the Central Authority be empowered to issue regalations which should apply to the whole country. This would do away with many of the anomalies which at present exist. I would not, however, restrict these regulations to this country. The Local Government Board, by their Foreign Meat Regulations, insist upon all countries exporting meat to this country adopting the standard recommended by the Royal Commission on Tuberculosis, 1898. If the home authorities can dictate terms so far as the meat supply is concerned, I think it is equally advisable and necessary that they insist upon a standard applicable to milk and its products. Undoubtedly, milk containing tubercle bacilli is dangerous to use as an article of food ; but, unfortunately, the danger to man is not restricted to its use, but extends to the use of its products. The danger attendant upon the consumption of infected milk or its products has been demonstrated by Herr and Beninde, who found tubercle bacilli in skimmed milk, buttermilk, cream, butter and centrifugated slime, especially in the two last. In butter the number of samples found infected among 444 examined by these and other investigators was 60, or 13 per cent. It has been abundantly proved that tubercle bacilli retain their virulence even after the products containing

them have been subjected to the ordinary processes of the dairy. For instance, in a series of experiments carried out by Schroeder and Cotton for the Bureau of Animal Industry of the United States of America, it was found that tubercle bacilli in butter retained their virulence for 133 days. These experiments are so interesting and instructive that it is of the utmost importance to the well-being of the inhabitants of this country to make them as public as possible. A sample of milk was drawn from a cow affected with tuberculosis of the udder, and the cream was carefully skimmed off and converted into butter, which was then salted in the proportion of one ounce to each pound of butter, and stored in a cupboard kept at about 60 degrees Fahr., every precaution being taken to prevent extraneous contamination. From time to time a small quantity was taken and injected into the abdominal cavity of guinea-pigs, each receiving a dose of 15½ grains. The age of the butter on the date of inoculation varied from 1 to 99 days, and in one instance reached 133 days. The period during which these tests were carried out was from 9th May till 21st August, 1907, the total number of guinea-pigs inoculated being 50; but, 5 dying prematurely from other causes and 1 being killed, there thus remained 44, which were permitted to die, the cause of death in every case being found, on *post-mortem* examination, to be tuberculosis, which the investigators considered to be due to the tubercle bacilli contained in the butter. The fact that guinea pigs contracted tuberculosis and died from the disease after being inoculated with butter kept 133 days demonstrates that tubercle bacilli may retain their virulence in butter considerably over four months, and there being no diminution in their virulence even then, it may safely be asserted that their vitality is retained for a much longer time. This series of experiments points to conclusions which surely cannot fail to weigh heavily on the hands of our legislators, and shows good grounds why this country should insist upon the supervision of milk cows, dairying operations, and kindred processes of manufacture, being carried out as rigorously in the countries of supply as our home authorities intend in future to enforce on herd owners here.—*The Scottish Farmer.*

Different Results in Meat Inspection.

We are indebted to the Medical Officer of Health of York for the following summary of replies received from 50 towns *re* seizure of tuberculous carcases:

The replies have been rather difficult to classify, but the folowing is a fairly complete summary (19 of the towns prefer to "Judge each case on its merits," or "on general principles"):—

(1) The following 31 towns practically follow the recommendations of the Royal Commission of 1898 in in their entirety—namely, to carry out the affirmative policy in regard to all the following queries:—Brighouse, Bradford, Bolton, Bristol, Cardiff, Chester, Coventry, Croydon, Glasgow, Halifax, Hull, Huddersfield, Hampstead, Leicester, Liverpool, Leeds, Middlesbrough, Manchester, Nottingham, Preston, Reigate, Rotherham, Sheffield, Sunderland, Stockport, Stoke Newington, St. Helens, Tottenham, Willesden, Wolverhampton, Winchester.

"More severely than the Royal Commission's recommendations":—Edinburgh and Newcastle.

The following towns do so partially, as stated in the particulars hereunder, namely:—

(2) *Do you condemn the entire carcase and all the organs*: (*a*) "*When there is miliary tuberculosis of both lungs?*"

"Yes."—Aberdeen, Blackpool, Blackburn, Brighton, Derby, Greeuwich, Ipswich, Keighley, London, Newport, Oldham, West Ham, York.

"No"—if the cattle are prime and the carcase itself does not show signs of disease:—Birkenhead, Dundee, Scarborough.

"Not Necessarily"—Lambeth.

(*b*) *When tuberculous lesions are present on the pleura and peritoneum?*"

"Yes."—Birkenhead, Greenwich, Ipswich, and West Ham.

"No"—if the carcase is in the early stages of the disease: Aberdeen, Blackpool, Blackburn, Brighton, Dundee, Derby, Keighley, London, Newport, Oldham, Scarborough, York.

"Not Necessarily"—Lambeth.

(*c*) "*When tuberculous lesions are present in the muscular system, or in the lymphatic glands embedded in or between the muscles?*"

"Yes"—Aberdeen, Blackpool, Blackburn, Brighton Dundee, Derby, Oldham.

"No"—if the carcase is not generally affected:—Birkenhead, Ipswich, Keighley, London, Newport, Scarborough, West Ham, York.

"Not Necessarily"—Greenwich.

(*d*) "*When tuberculous lesions exist in any part of an emaciated carcase?*"

"Not Necessarily"—Greenwich, Scarborough. The remainder say "Yes."

(3) *Do you always follow the recommendations of the Royal Commission in condemning the whole of the carcase where you have "tubercular deposit in any degree in the carcase of a pig?*"

"Yes"—Aberdeen, Brighouse, Bradford, Bolton, Birkenhead, Chester, Coventry, Edinburgh, Greenwich, Hull, Huddersfield, Hampstead, Lambeth, Liverpool, Middlesbrough, Nottingham, Newcastle, Preston, Reigate, Rotherham, Sheffield, Sunderland, Stockport, Stoke Newington, Tottenham, Winchester.

"No"—Blackpool, Blackburn, Cardiff, Ipswich, Keighley, Oldham, Scarborough, St. Helens, West Ham, Willesden, Wolverhampton.

"No."—(If only the glands of the head are affected, the head and neck are destroyed, and the rest of the carcase is passed):—Bristol, Brighton, Dundee, Derby, Glasgow, Halifax, Leeds, London, Manchester, Newport, York.

"No, we act upon the same lines as for cattle."—Croydon Leicester.—*Meat Trades Journal.*

Stiff-Sickness—Dr. Theiler's Work.

The disease known as "stijfziekte" (stiff-sickness), is one which has been prevalent in the Transvaal, the Cape and the Orange Free State for many years past, and the Dutch name by which it is known serves to indicate its character, and is usually the case in such instances. In later years another disease has made itself manifest, and is known as the "Three days' sickness." This has, in some instances, been confused with the older disease. The diseases are not identical, and the disease dealt with in this article is that which has been known for many years past in the Western districts of the Transvaal as stiff-sickness. One of the first veterinary surgeons to investigate this disease was Dr. Hutcheon of the Cape, who found it existing on farms where "Lamziekte," another disease, was prevalent. He described the disease most accurately and was under the impression that the two diseases were identical, and as they occurred in areas which were deficient in phosphates, he concluded that they were caused by the lack of phosphates and lime in the food. In March of 1908, Dr. Theiler and Mr. Gray, the Principal Veterinary Surgeon, paid a visit to Zeerust, where the disease was

known to exist, and the local veterinary surgeon, Mr. Evans, was able to show a few cases of the disease in an acute form, as well as others which had become of a chronic nature. These three gentlemen were at once struck with the similarity in symptoms between acute cases of stiff-sickness and that of laminitis in horses, and so striking was the impression that they did not hesitate to name the disease "Laminitis in cattle." This indicated that in their opinion the seat of the lesions must be in the laminæ of the hoof, and that in advanced stages of stiff-sickness the symptoms corresponded with the sequel of laminitis in horses. As laminitis in horses is known to be partly due to the toxic properties of certain food-stuffs, such as barley, rye, beans, etc., acting upon the laminæ, and causing inflammation therein, the theory of Dr. Hutcheon was discarded, and an attempt was made to discover some specific food, common in that neighbourhood, which might account for the existence of the disease.

The Boer Theory.

It was known that the Boers had for years past connected this disease to some extent with a plant which they had named the "Stijfziekte bosch," and the investigators at once came to the conclusion that the observant Boer was probably in the right, and proceeded to investigate upon the lines thus suggested. This theory was by no means universally accepted by the Boers, and other causes were believed to operate in the production of the disease.

The only course open to the investigators was to endeavour, by means of actual experiments, to establish or to disprove this opinion. In may be mentioned, in passing, that Mr. Burtt Davy, the Government Botanist, identified the so-called "Stijfziekte bosch" as "Crotalaria burkeana." It appears that some years ago Mr. Johnson, who was at the time Government Veterinary Surgeon at Barberton, had described a disease known as Stiff-sickness, and which existed in the neighbourhood of the town, as laminitis. No serious notice was taken of this description at this time, owing to the fact that its existence was not connected with any specific cause. Immediately before the visit to Zeerust, the late Mr. Turnbull, who was then Government Veterinary Surgeon at Barberton, drew attention to the existence of stiff-sickness in that neighbourhood, and identified it with the presence of the plant Crotalaria burkeana, which was found to be growing on the farms where the disease existed. It being decided that experiments should be made, quantities of the plant were secured from Zeerust and Barberton, and an animal was fed with it on three successive days, and after an interval of twelve days the food was again given for one day; the average feed amounting to six pounds per diem. No results were obtained from feeding the plants in the Laboratory, except of a negative character.

Barberton and Zeerust Experiments.

Dr. Theiler then decided to vary his experiments by sending cattle from the Laboratory to Barberton and Zeerust, so that they could be stabled and fed upon the plant daily. In case of a shortage of the necessary food, a quantity of veld hay was despatched from Pretoria to supplement any shortfall. Mr. Turnbull carried out the experiments in Barberton with two cows, numbered 607 and 624 respectively. He reported as follows:

("A," Cow 607.) Feeding commenced on the 18th of March. The animal refused to eat in the first instance, but did so after the plant was mixed with forage. The quantity daily eaten varied from five to sixteen pounds, but later it was never less than eighteen pounds, and, at one time, as much as twenty-eight pounds per day was given. On the 24th of March, six days after the commencement of the experiment, the cow was noticed to be tender in her feet. On the 9th of April, twenty-two days after the commencement of the experiment, the animal lay down and then developed typical symptoms of laminitis. On the 18th of April the cow was returned to Pretoria, and the following notes were made:—

"Symptoms of pain, hoof appears much larger than normal; there is a well-defined angle between the first and second phalanx."

("B," Cow 624.) This animal was kept under similar conditions to the first-named, and showed the first symptoms about the 24th of March. On the following day the peculiar symptoms of separation of the digits was noticeable. On the twelfth day she began to lie down, and showed symptoms of sickness, feeding badly for a few days. The feed was discontinued, but upon being continued the cow ate better. She was returned to Pretoria on the 21st of April, when the following notes were taken:—"Condition fair, signs of acute laminitis are pronounced; the animal places its legs forward and leans its weight on the heels, which almost touch the ground. The hind legs are advanced and the animal walks mainly on her heels, while the action of walking appears to be very painful. The front and back hoofs appears to be longer than normal, the digits standing apart. The inner digits of the front and the hind feet are longer than the outer ones; the coronary portion is swollen. The horns of the hoof have a reddish appearance, and feel warm to the touch. On lifting one leg, the animal shows signs of great pain."

The disease corresponding with that observed at Zeerust, it was identified as stiff-sickness. A second experiment was carried out at Zeerust by Mr. Webb, and though the animals received only an average ration of about four pounds of the plant per day, one of them, on being returned to Pretoria, was found to be suffering from stiff-sickness. A third experiment was undertaken for the purpose of procuring a very severe attack of the disease, so that the animal might be slaughtered for the purpose of studying the pathological anatomical lesions which would result from eating the plant. Two cows were selected and the experiments began on the 16th of April, 1910, in Barberton. The average quantity of the plant given per day was about eighteen pounds weight. On the 23rd April one cow was seen to be tender on her feet. The following day she lay down but would rise to feed. On the 1st of May she had difficulty in rising, and from the 2nd day of May she was constantly lying down and feeding from the ground. The other cow began to lie down on the 22nd of April, and on the following day had difficulty in rising, and lay with her fore-legs spread out. From the 24th to the 29th of April she lay down during most of the day, and her symptoms becoming worse, Mr. Turnbull reported the progress of stiff-sickness. Both cows were returned to Pretoria on the 26th of May, and the diagnosis of stiff-sickness was confirmed.

As the last-mentioned cow appeared to have the disease in the most acute form, she was killed on the 8th of June, and the following notes were taken at the post-mortem examination conducted by Mr. Mitchell:—"Sections of the claws of hind and fore feet show the presence of fibrous granular tissue, a quarter of an inch thick, separating the horny and the sensitive laminæ, particularly marked near the toe, and more pronounced in the hind than in the fore claws. The tissue around the coronopedal articulation is very much thickened, cutting hard dense fibrous tissue. Articular surfaces of os coronæ and os pedis show thickening and slight hyperæmia of the synovial capsule."

The diagnosis of laminitis was accordingly made. About the end of April, 1910, 12lbs. of the plant was sent from the O.F.S. with a request that it should be experimented with. Two gallons of tea were made from a portion of the sample, with which a cow was drenched, and the plant was then mixed with the food and was readily eaten. No symptoms developed.

EPICRESIS.

The experiments made in Barberton and Zeerust show that Crotalaria burkeana is the cause of stiff-sickness, but reference to the earlier experiments, and to experiment No. 4—all of which were failures—lead to the conclusion that, under certain conditions, the plant does not cause stiff-sickness. This may be either due to the fact that (1) on one occasion a considerable quantity of the plant was given at one feeding, while, under the conditions of the experiments at Barberton and Zeerust, the feeding was continued for a number of days. (2) The plants with which the feeding experiments were conducted at the laboratory at Onderstepoort were always in a dry state, while those with which the animals were fed elsewhere were always freshly cut. The plant, when dried, notwithstanding the large quantities given, may not be sufficiently operative to produce the disease, whereas, when freshly cut, and fed daily to the animals, it promptly produces the disease.

Such is a summary of the experiments which have been carried out by Dr. Theiler, assisted by Messrs. Gray, Turnbull, Webb and Burtt-Davy. The information contained serves to show the value of the work of our experts, and will, I am sure, greatly interest your intelligent readers.—*The Star* (Johannesburg).

A Veterinary Commemoration.

The present year is the 150th anniversary of the foundation, by Claude Bourgelat, at Lyons, of the Ecole Nationale Vétérinaire, as it is now called, and the event is to be celebrated at Lyons by the veterinary profession in the spring of 1912. Prof. Arloing, Director of the Lyons School, originated the proposal to commemorate the anniversary.

The school founded by Bourgelat was the first institution of its kind in the world. In 1765 he established the famous school at Alfort, and since then veterinary schools have been instituted in all civilized countries.

The first English school, the Royal Veteriaary College at Camden Town, was started in 1791 by Charles Vial de St. Bel, a French refugee, and a graduate of the Lyons School. He died, it is said, from glanders, and is buried in St. Pancras Churchyard.—*Times.*

F. R. S. E.

These letters mean "Fellow of the Royal Society of Edinburgh." They have acquired a new interest for agriculture during the past few weeks on account of the communication from the Society indicated received by agricultural colleges, the Highland and Agricultural Society, and possibly other bodies. The Fellows above referred to are anxious to take agriculture under their wing; they desire to co-ordinate all the institutions in Scotland which conduct agricultural experiments of any kind, to unite in a common appeal to the Development Commissioners for funds to carry out research work of the most recondite and scientific character. The question not unnaturally arises—What status has the Royal Society of Edinburgh, and on what grounds should it assume to itself this somewhat ambitious role? The question is all the more in point, because possibly not a few farmers may be of opinion that the "Royal Society" they thus hear about is the Royal Agricultural Society of England. Others may be of the opinion of Mr. W. S. Ferguson that this is a movement by a scientific body to obtain control of funds designed for the benefit of practical agriculture. That this is at least the opinion held pretty generally by the Board of the H. and A. Society scarcely admits of doubt.

The Royal Society of Edinburgh was founded many ears ago under a Royal Charter. Anybody can become a Fellow who (1) is a Fellow of the Royal Society of London; or (2) is a man of well-known literary or scientific reputation; or (3) has some clear connection with Scotland, and is otherwise admissible as if resident in Scotland; or (4) has submitted to the society a paper on some literary or scientific subject, judged by the Council to be worthy of publication by the Society. A nomination to a Fellowship must be made in favour of a candidate by at least four "Ordinary Fellows," two of whom must certify their recommendation from personal knowledge. The candidate must also make personal application to the secretary. This, with the recommendation aforesaid, is laid before the Council, and must be exhibited publicly in the society's rooms for a month, after which it shall be considered by the Council, and, if approved, a date will be fixed for the election. This takes place by ballot of the "Ordinary Fellows," and is determined by a majority of at least two-thirds of the votes, provided twenty-four Fellows be present and vote. Assuming the candidate gets through safely, within three months of his election he pays an admission fee of two guineas, and three guineas more as his annual contribution for that session. Thereafter so long as he pays three guineas per annum to the Society, he is at liberty to write the magical letters which stand at the head of this article after his name.—*Scottish Farmer.*

Veterinary Inspectors R.A.S.E.

At the monthly meeting of the Council of the R.A.S.E. in the Veterinary Section, Mr. Parker reported the election of the Earl of Northbrook as Chairman of the year. The Secretary had submitted the complete list of Veterinary Inspectors for the Norwich Show, as follows:

Chief Veterinary Officer,—John Malcolm, F.R.C.V.S., Holiday Street Wharf, Birmingham.

Veterinary Inspectors.—Harry V. Low, M.R.C.V.S., St. Giles Street, Norwich; Prof. J. Macqueen, F.R.C.V.S., Royal Veterinary College, Camden Town, London, N.W. William Bower, M.R.C.V.S., East Rudham, King's Lynn: F. L. Gooch, F.R.C.V.S., St. Martin's Stamford; T. G. Heatley, M.R.C.V.S., Woodbridge; Horace L. Roberts, F.R.C.V.S., 100 Princes Street, Ipswich; W. Shipley, F.R.C.V.S., Southdown, Great Yarmouth; R. C. Tayler, M.R.C.V.S., Queen Street, Colchester

Assist. Veterinary Officer.—William Trigger, F.R.C.V.S., Newcastle, Staffs.

Donations to R.C.V.S.

The Secretary of the Royal College of Veterinary Surgeons desires to acknowledge the receipt of further donations to the College funds, from Messrs.

F. A. Ball, Ormskirk	£1	1	0
H. W. Caton, London	1	1	0
S. H. Slocock. Hounslow	1	1	0
Amount previously acknowledged	34	13	0
	£37	16	0

ARMY VETERINARY SERVICE.

Extract from *London Gazette*,
WAR OFFICE, WHITEHALL, Feb. 7.

ARMY VETERINARY CORPS.

The undermentioned Lieuts. to be Capts.:—

W. H. Walker (seconded for service with the Egyptian Army), A. L. Horner, R. W. Mellard, J. O. Andrews, R. S. Audas (seconded for service with the Egyptian Army). Dated Feb. 3.

Horses superseded.

A block of land extending to 6000 acres bought the the other day is to be converted into one of the largest farms in Manitoba. The land is about seven miles west Headingly, on the north side of the Assiniboine River, along which it extends in a solid block. The price paid was 37 dollars (£7 12s. 7d.) per acre. It is intended to put on a large outfit of gas traction engines, to be used with an adequate equipment of ploughs, disc harrows, packers, seeders, and binders, so that a large portion of the land may be brought under crop next spring. Many of the great farms have been so handled successfully in Dakota and other north-western States, where steam and gas power has to a great extent taken the place of horses for farm purposes.—*M. F. P.*

Personal.

STINSON—COOPER.—On Feb. 7th, at Carey Chapel, Moulton, Northampton, Oscar Stinson, M.R.C.V.S., to Isobel Kincaid Cooper, youngest daughter of the Rev. Thomas A. Cooper.

Mr. HENRY B. EVE, M.R.C.V.S., of Folkestone, has been re-appointed official veterinary surgeon to the Folkestone Racecourse Company. Meetings will be held at Westerhanger during the year 1911.

OBITUARY.

HENRY POWER, M.B., LOND., F.R.C.S., ENG.,

Late Vice-President of the Royal College of Surgeons of England; and Consulting Ophthalmic Surgeon to St. Bartholomew's Hospital, and the Westminster Ophthalmic Hospital.

"We deeply regret to announce the death of Mr. Henry Power, Consulting Ophthalmic surgeon to St. Bartholomew's Hospital, and for more than 40 years a regular member of the staff of *The Lancet*, the sad event having occurred at his residence, Bagdale Hall, Whitby, on Wednesday, Jan. 18.

"When it is remembered that in addition to all his literary and official duties Mr. Power was for many years a leading London ophthalmic surgeon whose wise advice and manual dexterity were daily in demand, it will be wondered what time over he could have to place at the disposal of this journal. The fact is that he was untiring as well as a methodical worker, and his industry and love of order enabled him not only to keep abreast of ophthalmological literature, but also to read widely in anatomy, physiology and botany, and to record his candid views upon what he read with regularity. Week after week, year after year, in this manner he sat in genial judgment upon medical writers, and so closely accurate were his appreciations, and so obviously fair and friendly his strictures, that we can hardly remember an occasion when an author was moved to protest against his criticisms. Gradually, as different branches of science underwent development, Power advised us that it was time for us to seek the help of some one more in touch with special work in zoology, botany, and, lastly, in physiology; but for many years in these subjects as well as in his particular subject of ophthalmology he was our general adviser. No member of the staff was ever more missed than he when retirement from London broke his intimate association with us, and in this office his memory will always be cherished. And the feeling of regret that we can thus personally express will, we know, be shared by hundreds of his colleagues, pupils, patients, and friends, for it was impossible not to feel that Power's handsome presence and genial bearing were the exterior that fitted well a generous, simple, strenuous nature.

"At the Royal College of Surgeons of England he filled nearly all the official positions. He was a member of the Board of Examiners in Anatomy and Physiology from 1875 to 1880 and again from 1881 to 1884, and on the reconstituted board as an Examiner in Physiology from 1884 to 1886, and as an Examiner in Anatomy Anatomy and Physiology for the F.R.C.S. from 1884 to 1886. He served two terms of office as a member of the Council from 1879 to 1890, and was a Vice-President for the year 1885.

"Among other posts which he filled may be enumerated the office of Professor of Physiology at the Royal Veterinary College 1881—1904, where he became the friend and trusted adviser of many generations of veterinary students. On his retirement he was much touched by their presentation to him of an arm-chair fitted with an electric reading-lamp and furnished with an appropriate inscription, as well as by a separate presentation from the veterinary surgeons in South Africa who had been too late in joining the original testimonial.—*The Lancet.*

GEORGE WATERS, M.R.C.V.S., Cambridge.
Graduated, Edin: April, 1845.

Mr. Waters died on Jan. 30th, from cardiac failure, following chronic bronchitis. Aged 91 years.

DAN GIBEON, M.R.C.V.S., Gt. Marlow, Bucks.
Edin: April, 1864.

Death took place on Feb. 4th, from phthisis. Aged 60 years.

WALTER GEORGE BOSWELL, M.R.C.V.S., 7 Lavender Sweep, Clapham Junction, S.W.
Lond: July, 1876.

Death occurred on Feb. 4th. at the age of 66 years, from cardiac failure.

COLLEGE ARMORIAL BEARINGS.

Sir,

The collection of the duty for the use of Armorial Bearings was transferred last year from the Officers of Inland Revenue to the various County Councils and Borough District Councils.

The College has always paid the usual duty, and the Inland Revenue have permitted members of the College to use the Armorial Bearings of the College for strictly professional purposes without requiring them also to pay duty.

Some of the County Councils are taking a different view, and one member has already been prosecuted, although the prosecution failed, and others are threatened.

My object in writing to you is to request that if any member is threatened he will at once communicate with the Secretary of the College.—Yours faithfully,

GEO. THATCHER,
Solicitor to the R.C.V.S.

VOLUNTARY SUBSCRIPTION TO R.C.V.S.

Sir,

The small list of subscribers to the above leads me to think that the profession have not realised the facts of the case or else that the matter has not been started on a proper basis. Will it not strike the members that if the Council are in such a position that they are prepared to accept subscriptions, they might have gone further and formulated a plan of inviting the same officially. Surely this will be an excellent opportunity for veterinary surgeons to show they are in favour of the Bill, and would be strong evidence in support of it.

If thought desirable, could not a scheme be drawn up so that members could subscribe at the present time, and when the Bill becomes law, have, say, 50 per cent. of the subscriptions deducted each year from the amount due under the Veterinary Surgeons Bill, with the understanding that should the same not become law the amount is given as a donation.—Yours faithfully,

W. J. FLETCHER.